Influence of plastic ...

32658

S/126/61/012/005/018/028
E073/E535

composition of enriched sections in the Cu-Ti alloy, the presence
of which leads to the appearance of satellites on X-ray diffrac-
tion patterns, as well as the composition of the intermediate
α'-phase, are near to the composition of the stable phase;
the process of formation of an intermediate and a stable phase
from the enriched sections of the crystals is a diffusionless
process of the polymorphous type, which does not require
germinations of centres of a new structure. The latter conclusion
is based on the fact that even a small degree of plastic deforma-
tion (9,8%) leads to considerable structural changes if the struc-
tural state is highly unstable;   ,a the structure approaches
a more stable state, considerably higher deformations are
required for changes in the structure of the crystals of the
aged alloy.   There are 2 tables and 6 references: 5 Soviet-bloc
and 1 non-Soviet-bloc.   The English-language reference reads as
follows: Ref.1: Thomas G., Nutting J., Hirsch P. J.Inst.Metals,
1957, 86, 7.
ASSOCIATION: Institut metallofiziki AN UkrSSR
             (Institute of Metal Physics AS UkrSSR)
SUBMITTED: March 20, 1961
Card 5/5

S/123/62/000/017/004/006
A052/A101

AUTHORS: Nesterenko, Ye. G., Chuistov, K. V.

TITLE: The aging characteristics of copper-titanium-beryllium alloys

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 17, 1962, 21, abstract
             17B111 ("Sb. nauchn. rabot In-ta metallofiz. AN UkrSSR", no. 13,
             1961, 142 - 146)

TEXT: The decomposition was studied of two (I and II) copper-titanium-
beryllium alloys smelted of oxygen-free copper, titanium iodide and technically
pure beryllium and containing (in weight %) 1.19 Ti and 0.96 Be (alloy I) and
2.12 Ti and 0.50 Be (alloy II). A hardness measurement of alloys after an hour's
aging has shown that the alloys have 2 hardness maxima: the first one at the de-
composition temperature of 300°C coincides with the hardness maximum of copper-
beryllium alloy and the second one (at 400 - 500°C) coincides with the hardness
maximum of copper-titanium alloy. Thus the decomposition of the supersaturated
solid solution of Ti and Be in copper takes its course in two stages: in the
first stage Be and in the second stage Ti precipitates. The same fact is con-

Card 1/2

The aging characteristics of...

S/123/62/000/017/004/006
A052/A101

firmed by the measurement of the crystalline lattice parameter of the investigated alloys after various heat treatments. The investigation has not detected the modulated structure and intermediate α-phase formation, and after an hour's aging at 400°C the formation of sufficiently large stable β-phase crystals (Cu_3Ti) has been observed. There are 3 figures.

T. Kislyakova

[Abstracter's note: Complete translation]

Card 2/2

S/601/62/000/014/008/012
I003/I203

AUTHORS: Nesterenko, E. G. and K. V. Chuistov

TITLE: The influenc of imperfections in crystals on the strengthening of decomposing solid solutions

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot. no. 14. Kiev, 1962. Voprosy fiziki metallov i metallovedeniya, 89-104

TEXT: The works recently published by several Soviet authors indicate that the stregthening of aged alloys is due to a breaking up of the blocks of the mosaic structure and to the imperfections in the crystalline lattices. However, no quantitative analysis of the data obtained in these works could be carried out because different alloys were involved. In order to overcome this difficulty, the influence of various aging processes as well as of the structure and of the amount of the precipitating phase on the variation of the crystalline structure and on the strengthening of the supersaturated solid solution during aging is determined by comparing data from investigations of various copper-base alloys. Binary alloys Cu-Be, Cu-Ag, Cu-Ti and ternary alloys Cu-Ti-Zr and Cu-Ti-Be were prepared, heated to 800-950°C and quenched in water. The samples were then aged at temperatures from 100 to 700°C. The resulting imperfections in the crystalline lattices were investigated by X-ray methods. The results showed that the strengthening of the supersaturated solid solu-

Card 1/2

S/601/62/000/016/012/029
E193/E383

AUTHORS: Nesterenko, Ye.G. and Chuistov, K.V.

TITLE: The effect of plastic deformation on the decomposition
              and stability of second-phase precipitates in
              copper-titanium and copper-titanium-chromium alloys

SOURCE: Akademiya nauk Ukrayinskoyi RSR. Instytut metalo-
              fyzyky. Sbornik nauchnykh rabot. no. 16. Kiyev,
              1962. Voprosy fiziki metallov i metallovedeniya.
              90 - 102

TEXT: The object of the present investigation was to study
the effect of plastic deformation on the decomposition of solution-
treated 4.5% Ti-Cu alloy and on the structural state of this and
the 5% Cr - 5% Ti-Cu alloy, solution-treated and then aged. After
subjecting the test pieces to the appropriate heat and mechanical
treatment, X-ray diffraction measurements were used to determine the
"modulation period" Q , size L_{Φ} of the intermediate α' - and
stable $\beta(Cu_3Ti)$ phases, the magnitude $\delta a/a$ of the distortions of
the second type and the dimensions D of the mosaic blocks of the
matrix. The process of ageing was followed by hardness, H_V ,
Card 1/3

The effect of ....

S/601/62/000/016/012/029
E193/E383

measurements. Conclusions - 1) Plastic deformation of the solution-treated Cu-Ti alloy slows down the rate of the initial stage of decomposition of the solid solution (formation of the "modulated" structure) and accelerates the process of formation and growth of the intermediate- and stable-phase crystals. The general effect of preliminary plastic deformation on the kinetics of ageing of the Cu-Ti alloy is demonstrated in Fig. 3, where H_V (kg/mm^2), Q (Å), D (10^{-5} cm) and the dimensions of the α'-phase (L, Å) are plotted against time (hours, upper scale, or log τ, min, lower scale); shaded, half-shaded and unshaded circles relate, respectively, to test pieces aged at 500 °C, deformed to 22% deformation and then aged at 500 °C and deformed to 44% and aged at 500 °C. 2) As a result of plastic deformation of preliminarily aged Cu-Ti and Cu-Ti-Cr alloys, crystals of the intermediate and stable phases are formed from the enriched zones of the solid solution, and a change in the lattice symmetry of the intermediate α'-phase accompanied by the formation of the stable β-phase crystals takes place. 3) The minimum degree of plastic deformation at which structural changes in preliminarily aged alloys can be observed Card 2/3

The effect of ....

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E193/E383

depends on the type of deformation, being 38% for deformation in rolling and 6.3% for deformation in tension. 4) The composition of the Ti-enriched regions, giving rise to the appearance of satellite diffractions and to the formation of α'-phase crystals, is near to the composition of the stable phase. 5) The results of the present investigation provide a support for the view that the phase-transformation in Cu-Ti alloy can be regarded as a transformation of the allotropic type. There are 3 figures and 6 tables.

SUBMITTED:
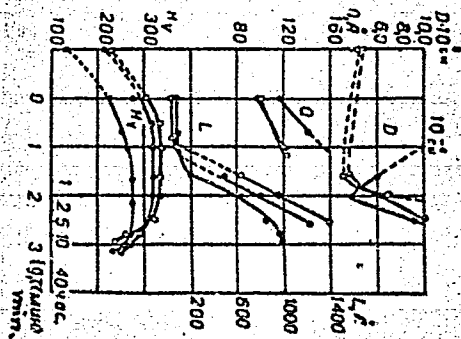
Card 3/3   Fig. 3:

GERTSRIKEN, S.D.[deceased]; DEKHTYAR, I.Ya.; KRIVOGLAZ, M.A.;
LARIKOV, L.N.; LYSAK, L.I.; NESTERENKO, Ye.G.; NOVIKOV,
N.N.; SOSNINA, Ye.I.; SLYUSAR, B.F.; TIKHONOV, L.V.;
TREFILOV, V.I.; CHUISTOV, K.V.;BERLIN,Ye.N.,red.izd-va;
DOBUZHINSKAYA,L.V.,tekhn.red.

[Physical principles of the strength and plasticity of metals]
Fizicheskie osnovy prochnosti i plastichnosti metallov. [By]
S.D.Gertsriken i dr. Moskva, Metallurgizdat, 1963. 321 p.
(MIRA 16:12)
(Physical metallurgy)

L 29961-65   EWT(m)/T/EWP(t)/EWP(b)   IJP(c)   JD

the alloy. At the present time there are two methods for studying anomalous x-ray

the monocrystalline specimen method and the coarse-grained micro-

fraction effects which are observed and the coarse-grained specimen method is simpler and does not require a good monocrystalline specimen. ... is obtained, i.e. a single-valued relation between the anomalous

3 figures.

OTHER: 005

NESTERENKO, Ye.G.; CHUISTOV, K.V.

X-ray scattering by "Guinier complexes." Kristallografiia 10 no.3:
324-329 My-Je '65.   (MIRA 18:7)

L 35906-66   EWT(m)/T/EWP(t)/ETI   IJP(c)   JD/HW/JD

ACC NR: AP6007360   SOURCE CODE: UR/0126/66/021/002/0311/0314

AUTHORS: Kokorin, V. V.;   Chuistov, K. V.

ORG: Institute of Metal Physics, AN UkrSSR (Institut metallofiziki, AN UkrSSR)

TITLE: The initial stages of decomposition of supersaturated solid solutions Co–Ta and Co–Nb

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 2, 1966, 311-314

TOPIC TAGS: cobalt alloy, tantalum containing alloy, niobium containing alloy, x ray spectroscopy, solid solution, thermal decomposition, crystal lattice parameter

ABSTRACT: The mechanism of the initial stages of decomposition of supersaturated solid solutions of Co–Ta (8 wt % Ta) and Co–Nb (4 wt % Nb) was studied by means of x-ray analysis. The study supplements the results of D. A. Fritslen, V. P. Folkner, B. R. Barret, and R. V. Faunshteyn (Sb. Stareniya splavov, M., Metallurgizdat, 1962, str. 450). The experimental procedure is described by A. M. Yelistratov (DAN SSSR, 1949, 89, 3, 337) and Ye. G. Nesterenko and K. V. Chuistov (Sb. Voprosy fiziki metallov i metallovedeniya, No. 19, Kiyev, IZD. AN UkrSSR, str. 155). The experimental results are presented graphically (see Fig. 1). The initial stages in the decomposition of supersaturated Co–Ta and Co–Nb solid solutions are characterized by the formation of plate-like regions (Gin'ye complexes). These regions are distributed

UDC: 548.4:548.73

Card 1/2

NESTERENKO,O.O.; CHUISTOV,V.M.

Basic problems in the field of economic studies in the Ukraine.
Visnyk AN URSR 26 no.9:7-15 S'55.   (MIRA 8:11)
  (Ukraine--Economic conditions) (Ukraine--Economics--Study
                                        and teaching)

SNEZHKO, Ivan Timofeyevich.[Sniezhko, I.T.], kand.ekon.nauk; CHUISTOVA,
V.M., kand.ekon.nauk, red.; STAROSTENKO, T.M., red.

[Building communism in the Rumanian People's Republic] Budivnytstvo
sotsializmu v Rumuns'kii Narodnii Respublitsi. Kyiv, 1958. 47 p.
(Tovarystvo dlia poshyrennia politychnykh i naukovykh znan'
Ukrains'koi RSR. Ser.1, no.23)   (MIRA 12:1)
                    (Rumania--Economic conditions)

CHUISTOV, Vladimir Mikhaylovich, kand.ekonom.nauk; DEMCHENKO, V.P., kand.ekonom.nauk, glavnyy red.

[The seven-year plan is the decisive phase in the carrying out of the principal economic objective of the U.S.S.R.] Semyrichnyi plan - vyrishal'nyi etap v zdiisnenni osnovnoho ekonomichnoho zavdannia SRSR. Kyiv, 1959. 50 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.2, no.6)   (MIRA 12:9)
(Russia—Economic policy)

CHUISTOV, V.M.

[Problems in the utilization of fixed assets in the U.S.S.R.]
Pytannia vidtvorennia osnovnykh vyrobnychykh fondiv SRSR.
Kyiv, Akad.nauk URSR, In-t ekon., 1959. 172 p.   (MIRA 13:1)
                        (Finance)

CHUISTOV, V.M., kand. ekon. nauk; CHERNENKO, M.S.; KRASNOKUTSKAYA,
O.I.[Krasnokuts'ka, O.I.]; DROSOVSKAYA, L.I.[Drosovs'ka, L.I.];
MOKIYENKO, B.F.; DARAGAN, M.V.[Darahan, M.V.]; OGANYAN, G.A.
[Ohanian, H.A.]; TERESHCHENKO, I.P.; KRUGLIKOV, B.I.[Kruhlikov,
B.I.]; KOROID, O.S., otv. red.; IVAN'KOV, M.D., red.;
KADASHEVICH, O.O.[Kadashevych, A.A.], tekhn. red.

[Socialist reproduction of the means of production]Sotsiali-
stychne vidtvorennia. Kyiv, Vyd-vo Akad. nauk URSR, 1962. 298 p.
(MIRA 15:12)

1. Akademiya nauk URSR, Kiev. Instytut ekonomiky. 2. Chlen-
korrespondent Akademii nauk Ukr. SSR (for Koroid). 3. Institut
ekonomiki Akademii nauk Ukr. SSR (for all except Koroid, Ivan'kov,
Kadashevich).

(Economics)

DARAGAN, M.V.[Darahan, M.V.]; CHUISTOV, V.M.; NESTERENKO, O.O.,
glav. red.; ZHUKOV, A.M., red.; MIL'KIN, Yu.A., tekhn. red.

[Creating the material and technical foundation of communism;
visual aid]Stvorennia material'no-tekhnichnoi bazy komunizmu
v SRSR; naochnyi posibnyk. Kyiv, Derzhpolitvydav URSR, 1962.
30 p.   (MIRA 16:3)

1. Chlen-korrespondent Akademii nauk Ukr. SSR (for Nesterenko).
(Russia—Economic policy—Audio-visual aids)

KUNCHIY, Lyudmila Vasil'yevna [Kunchii, L.V.], kand. ekon. nauk;
CHUISTOV, V.M., doktor ekon. nauk, otv. red.; VASHETS',
S.I., red.

[Economic development of the young sovereign countries
of Asia and Africa] Ekonomichnyi rozvytok molodykh su-
verennykh krain Azii i Afryky. Kyiv, Tovarystvo "Znannia"
URSR, 1963. 39 p.   (MIRA 17:11)

CHUKA, A. [Ciuca, A.]; ZHUKOVSKIY, V.; MIRKU, I. [Mircu, I.]; POSTEL'NIKU, D. [Postelnicu, D.]

Premature aging of the population in an endemic goiter zone.
Vest. AMN SSSR 19 no.6:23-27 '64.   (MIRA 18:4)

1. Institut geriatrii, Bukharest, Rumyniya.

ACC NR: AP7000331   SOURCE CODE: UR/0413/66/000/022/0084/0084

INVENTOR: Vakusevich, L. A.; Klebanov, D. L.; Terpagosova, I. Z.; Chukalin, V. I.

ORG: none

TITLE: High-alumina borosilicate glass [announced by the Scientific Institute of Electrovacuum Glass Research (Nauchno-issledovatel'skiy institut elektrovakuumnogo stekla)]   Class 32, No. 188634

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 84

TOPIC TAGS: silicate glass, glass property, optic spectrum

ABSTRACT: To make borosilicate high-alumina glass with SiO_2, B_2O_3, Al_2O_3, CaO, MgO, and BaO transparent with respect to the visual region of the spectrum under conditions of severe irradiation, the components have been combined as follows (wt %): 50—53 SiO_2, 7—10 B_2O_3, 23—25 Al_2O_3, 7.5—8.5 CaO, 3.5—4.5 MgO, 3—5 BaO. In addition, the glass contains 0.1—1.5% of CeO_2. [Translation]   [KP]

SUB CODE: 11/SUBM DATE: 17Sep64/
Card 1/1   UDC: 666.113.655'621'431'46'41'28'27

CHUKALOV, N. N.

Chukalov, N. ". "On the problem of treating infected abortions," Trudy Kazanak. gos.
med. in-ta, 1948, p. 93-98.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 18, 1949).

CHUKALOV, N. N.

Chukalov, N. N. - "Eclampsia, based on material from the obstetric clinic", Trudy Medinstituta (Izhev. gos. med. in-t), Vol. VI, 1948, p. 211-13.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal Inykh Statey, No. 19, 1949).

CHUKALOV, N. N.

Chukalov, N. N. - "On the problem of operational methods of treating full prolapse of the uterus", Trudy Medinstituta (Izhev. gos. med. in-t), Vol. VI, 1948, p. 225-29.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

CHUKALOV, N.N., prof., doktor med.nauk; VASIL'KOVA, A.A., dotsent, kand.med.
nauk

   Extending indications for cesarean section. Trudy Izhev.gos.med.inst.
   13:226-229 '51.   (MIRA 13:2)

   1. Iz kafedry akusherstva i ginekologii Izhevskogo meditsinskogo
   instituta. Zaveduyushchiy kafedroy - prof. N.N. Chukalov.
                      (CESAREAN SECTION)

CHUKALOV, N.N., dotsent, prof.med.nauk; VASIL'KOVA, A.A., dotsent, kand.med.
nauk

Protection of the perineum in the management of normal labor. Trudy
Izhev..gos.med.inst. 13:230-235 '51.   (MIRA 13:2)

1. Iz kafedry akusherstva i ginekologii Izhevskogo meditsinskogo
instituta. Zaveduyushchiy kafedroy - prof. N.N. Chukalov.
      (LABOR (OBSTETRICS))   (PERINEUM)

CHUKALOV, N.N., professor

Conduct of the normal placental stage. Akush. i gin. no.4:48-50
Jl-Ag '54.   (MLRA 7:11)

1. Iz kafedry akusherstva i ginekologii (zav. prof. N.N.Chukalov)
Izhevskogo meditsinskogo instituta.
     (LABOR,
          third stage, conduction)

CHUKALOV, N.N.,professor

Management of labor with pelvic presentation. Akush. i gin. 32
no.1:23-25 Ja-F '56   (MLRA 9:6)

1. Iz kafedry akusherstva i ginekologii (zav. prof. N.N. Chukalov)
Izhevskogo meditsinskogo instituta (dir. prof. N.F. Rupasov)
        (LABOR, PRESENTATION
            pelvic, management)

CHUKALOV, N.N.; DISHEL', Z.A.; MIKHAYLOVA, V.G.

Use of prophylactic external version. Akush.i gin. 36 no.1:
104-105 Ja-F '60.   (MIRA 13:10)
                    (LABOR (OBSTETRICS))

CHUKALOVSKAYA, R.N.

USSR / Human and Animal Morphology (Normal and Pathological).   S
    Lymphatic System.

Abs Jour   : Ref Zhur - Biol, No 21, 1958, No 97114

Author   : Chukalovskaya, R.N.
Inst   : Leningrad Veterinary Institute
Title   : Histological Changes in the Epithelium of Tonsils of the
              Pharyngeal Ring in Farm Animals in Connection With
              Infiltration.

Orig Pub   : Sb. rabot Leningr. vet. in-t, 1957, vyp. 20, 211-222

Abstract   : It was shown on 40 horses, pigs, cattle, sheep and goats,
              that in the standard the process of infiltration by
              lymphocytes (L) of the epithelium (E) of the surface and
              tonsillary (T) crypts is observed on all regions of the
              pharyngeal lymphoid ring. L pass through E of T and may
              divide. L first move intercellularly; later, they excrete
              ferments which dissolve epithelial cells, as a result of
              which cavities form in E. Infiltration of E is more
Card 1/2

51

CHUKALOVSKAYA, R.N., Cand biol Sci -- (diss) "Histological

study of the glottal lymphoid ring in agricultural

animals." Len, 1958, 19 pp with diagrams; 1 sheet of

tables (Min of Agr USSR. Len Vet Inst. Chair of

Histology and Embryology) 150 copies (KL, 50-58, 122)

- 42 -

VOLGIN, A.I., inzh.; TALAYEVA, G.V., inzh.; CHUKALOVSKIY, P.A., inzh.

Caprolan machine parts. Khim.i neft. mashinostr. no.8:40-41
Ag '65.   (MIRA 18:12)

CHUKAN, B.K.

Selection of anchors for rod bolting. Shakht. stroi. no.7:24-27
'59.   (MIRA 12:10)
            (Mine roof bolting)

CHUKAN, B.K., inzh.

Using permanent rod timbering in lining tunnels. Transp.stroi.
10 no.1:49-52 Ja '60.   (MIRA 13:6)
        (Tunneling) (Reinforced concrete)

CHUKAN, B.K., kand.tekhn.nauk

Stabilizing rounded slopes with rods. Transp. stroi. 12 no.3:
56-57 Mr '62.   (MIRA 16:11)

CHUKAN, B. K., kand. tekhn. nauk; TAMBIYEV, A. A., gornyy inzh.;
KUZIN, B. N., gornyy inzh.; BIRYUKOV, Yu. M., gornyy inzh.

Experimental use of rod bolting with sprayed concrete in mines
of the Rostov Economic Region. Gor. zhur. no.10:24-27 O '62.
(MIRA 15:10)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu, Rostov-
na-Donu.

(Rostov Province—Mine roof bolting)
(Concrete construction)

CHUKAN, B.K., inzh.

Mining in Sweden by the Janol method (from "Engineering and Mining Journal," no.7, 1959). Shakht. stroi. 7 no.2:26-28 F '63.

(MIRA 16:3)

(Sweden--Mining engineering)   (Blasting)

CHUKAN, B.K., kand. tekhn. nauk; ALIMOV, Sh.S., inzh.;
BIRYUKOV, Yu.M., inzh.

Using a concrete sprayer for strengthening concrete and
reinforced concrete structural elements. Prom. stroi. 41
no.11:44-45 N '63.
                                                    (MIRA 17:2)

CHUKAN, B.K., kand. tekhn. nauk

Combined supports for workings in deep mines. Shakht. stroi.
9 no.6:8-9 Je '65.   (MIRA 18:7)

1. Rostovskiy inzhenerno-stroitel'nyy institut.

SEMEVSKIY, Vladimir Nikolayevich, prof., doktor tekhn. nauk;
    VOLZHSKIY, Vladlen Mikhaylovich, gornyy inzh.;
    TIMOFEYEV, Oleg Vladimirovich, dots.,kand. tekhn. nauk;
    SHIROKOV, Anatoliy Pavlovich, kand. tekhn. nauk;
    KRAVCHENKO, Grigoriy Ivanovich, kand. tekhn. nauk;
    CHUKAN, Boris Karpovich, kand. tekhn. nauk; ETINGOV,
    Semen Isayevich, gornyy inzh.; NESTERENKO, G.T., kand.
    tekhn. nauk, retsenzent

[Rod bolting] Shtangovaia krep'. Moskva, Nedra, 1965.
327 p.   (MIRA 18:7)
1. Zaveduyushchiy kafedroy Leningradskogo gornogo instituta
im. G.V.Plekhanova (for Semevskiy). 2. Leningradskiy gornyy
institut im. G.V.Plekhanova (for Volzhskiy, Timofeyev).
3. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut
(for Shirokov).

CHUKAN, B.K., kand. tekhn. nauk; ALIMOV, Sh.S., inzh.; KUZIN, B.N., inzh.

Gunite in construction. Prom. stroi. 42 no.3:27-28 '65. (MIRA 18:7)

CHUKANIN, A. K.

"For Correct Technical Definitions in Textbooks," Tekst. prom., 12, No.7, 1952

SYTINSKIY, A.D.; CHUKANIN, K.I.

Atmospheric circulation in the northern Atlantic and microseisms
in Pulkovo. Izv. AN SSSR. Ser. geofiz. no.8:1238-1239 Ag '63.
(MIRA 16:9)
1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
Predstavleno chlenom redaktsionnoy kollegii Izvestiy AN SSSR,
Seriya geofizicheskaya, Ye.F.Savarenskim.
(Pulkovo—Seismometry) (Atlantic Ocean—Atmosphere)

RAGCZIN, A.I.; CHUKANIN, K.I.

      Mean trajectories and transport velocities of baric systems in the
Eurasian Arctic and Subarctic. Trudy ANII 217:35-64 '59.

                              (MIRA 13:2)

          (Arctic regions--Cyclones)

VOSKRESENSKIY, A.I.; CHUKANIN, K.I.

      Meteorological conditions promoting icing in St and Sc
      clouds. Trudy AANII 228:124-134 '59.   (MIRA 13:2)
        (Arctic regions--Airplanes--Ice prevention)

S/169/62/000/001/055/083
D228/D302

AUTHORS: Ragozin, A. I. and Chukanin, K. I.

TITLE: Direction and speed of movement of cyclones and anti-
              cyclones in the Arctic

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 51, ab-
              stract 1B328 (Tr. Arkt. i antarkt. n.-i. in-ta, 235,
              1961, 37-46)

TEXT: Maps of the prevailing trajectories and frequency of Arctic
cyclones and anticyclones for the most characteristic months of
each season (January, April, July, October) were compiled from the
synoptic maps for a ten-year period. The average speeds of move-
ment of cyclones and anticyclones were calculated for each month.
In most cases the average rate of cyclone movement is, according
to the authors' data, higher than the rate of anticyclone movement.
The speed of movement of individual anticyclones exceeds 100 km/hr.
Seasonal changes in this velocity are largely determined by sea-
sonal variations in the AT-500 gradient between 30 and 80°N. 8 re-
ferences. /¯Abstractor's note: Complete translation._/
Card 1/1

S/169/62/000/004/040/103
D228/D301

AUTHORS: Ragozin, A. I. and Chukanin, K. I.

TITLE: Prevalent cyclone trajectories in the Arctic during
               the main forms of atmospheric circulation

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1962, 41-42,
               abstract 4B242 (Tr. Arkt. i antarkt. n.-i. in-ta,
               240, 1961, 163-176)

TEXT: Maps of the average cyclone trajectories during different
forms of atmospheric circulation (W, E and C for G. Ya. Vangen-
geym's Atlantic-European sector) in each season were prepared from
synoptic charts and cyclone-trajectory maps for 1949-1956. Tra-
jectory charts were then compiled for each homogeneous circulation
period with a duration of more than 10 days, after which the tra-
jectories for each circulation form and each season were incorpo-
rated on a single blank map of polar stereographic projection,
with a scale of 1:20,000,000. The frequency determination was made
on a provisional grid of squares with sides of 2 cm, for which the

Card 1/2

Prevalent cyclone trajectories ...   S/169/62/000/004/040/103
                                       D228/D302

number of trajectories intersecting each square was referred to
its middle. No allowance was made for the cartographic areal dis-
tortion. The prevalence of processes of the easterly circulation
form is a feature of the processes of the period for which the maps
were constructed. The westerly circulation form is characterized
by the small quantity of trajectories in the central Arctic, es-
pecially in spring and summer. Trajectories, skirting on the north
the high-altitude ridge over the Union's European territory, are
well expressed on the charts of the easterly circulation form.
During the meridional form of circulation the belt of the highest
trajectory frequency passes from Greenland's east coasts across the
Barents Sea to the north-eastern areas of the Union's European
territory in autumn, winter, and spring; in summer this zone is
expressed much more weakly. Calculation of the total number of
trajectories in all four seasons during each circulation form show-
ed that the number of days in homogeneous circulation periods is
not the same for each form in each season. The mean intensity of
the cyclonic activity in the Atlantic-European sector grows from
the spring to the winter. 7 references. /¯Abstracter's note: Com-
plete translation._/
Card 2/2

L 23840-65   EWT(1)/FCC   GW
ACCESSION NR: AT4048797   S/3116/63/255/000/0143/0157

AUTHOR: Ragozin, A.I., Chukanin, K.I.   BT/

... ... uling paths of cyclones and anticyclones during standard synoptic processes

... ... Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

... ... long range ... ...
... ... atmospheric pressure ... ...

... ...

... ...

... 5

L 2380.0-65
ACCESSION NR: AT4048797   /

-ter was to compile charts of the paths of cyclones and anticyclones separately for each
. . . . . period The paths of cyclones and anticyclones wer . . .
. . . type of Arctic process as shown in F.. . . . .
. . . en were used to count the number of path . . . .
. . . an area of . . . . .

. . . .
. . . ers. assigned to the middle of each grid square . . .   . .
. . . . . . lines were drawn to show the frequency of the corres. . . .
. . . . . posite charts of paths and charts of their frequency ma. . . . . .
. . . detect the prevailing paths for each . . . . .
. . . .
. . . . . .

. . . ing. art has . . . . . .

. . . Arkticheskiy i antarkticheskiy nauchno-issledovat . . . .
. . . he Scientific Research Institute)

SUBMITTED: 0C   ENCL: 03   SUB CODE: ES
.. REF SOV: 003   OTHER: 000

Card 2/5

ACCESSION NR: AP4030345   s/0049/64/000/003/0430/0435

AUTHOR: Chukanin, K. I.

TITLE: Some peculiarities in atmospheric circulation and in the magnetic field of the earth

SOURCE: AN SSSR. Izv. Ser. geofiz., no. 3, 1964, 430-435

TOPIC TAGS: atmosphere, atmospheric circulation, magnetic field, earth's magnetic field, magnetic meridian, horizontal component, horizontal magnetic component, magnetic isopleth, ionosphere, paleomagnetism

ABSTRACT: The author has attempted a qualitative examination of results obtained from observations on the earth's magnetic field and on the circulation of the atmosphere in high latitudes of the northern hemisphere. He points out some peculiar features in the published magnetic maps (magnetic meridians and horizontal components) for the year 1950 (O novy*kh sovetskikh issledovaniyakh i otkry*tiyakh v Tsentral'noy Arktike. Izv. AN SSSR, ser. geogr., No. 5, 1954). The meridians form a narrow sheaf or bundle that extends from the magnetic pole through the geographic pole to the coast of Siberia. Near the Siberian coast this sheaf fans out

Card   1/3

ACCESSION NR: AP4030345

and assumes a more or less normal pattern for this latitude. The map of horizontal components shows an ellipsoidal pattern of magnetic isopleths, with a focus in the vicinity of the north magnetic pole and with the major axis of the ellipse passing near the north geographic pole and extending in a direction toward the Siberian coast (like the sheaf of magnetic meridians). In comparing these patterns with the vortical circulation of the atmosphere a distinct coincidence is observed. From a consideration of many hypotheses based on known features of structure in the earth's atmosphere and on principles of electromagnetic phenomena, the author suggests that the external magnetic field arising from the complex of electrical and circulatory processes in the ionosphere, interacting with the earth-core, gives birth to an induced internal magnetic field, the strength of which, by analogy with the core of an electromagnet, may at times exceed the strength of the external magnetic field. The author further suggests that this hypothesis may be used to explain existing paleomagnetic data. Orig. art. has: 4 figures.

ASSOCIATION: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut (Arctic and Antarctic Scientific Research Institute)

SUBMITTED: 29May63   DATE ACQ: 29Apr64   ENCL: 00

Card 2/3

ACCESSION NR: AP4030345

SUB CODE: AS   NO REF SOV: 015   OTHER: 003

Card   3/3

Chukanin, K. I.

...climatic characteristics of the Arctic

...conditions ...

cyclogenesis, anticyclogenesis

...Analysis of synoptic charts for January and July 19..-1958 has made it pos-

...generally occurs there when...

ACCESSION NR: AT5017502

square kilometers. Fig. 2 of the Enclosure shows the total number of cases of cyclogene-
sis for January; Fig. 3 of the Enclosure is the corresponding map of anticyclogenesis.
similar maps for July. The region of cyclogenesis near Greenland is pre-

Lenin-

ENCLOSURE

January (1) and
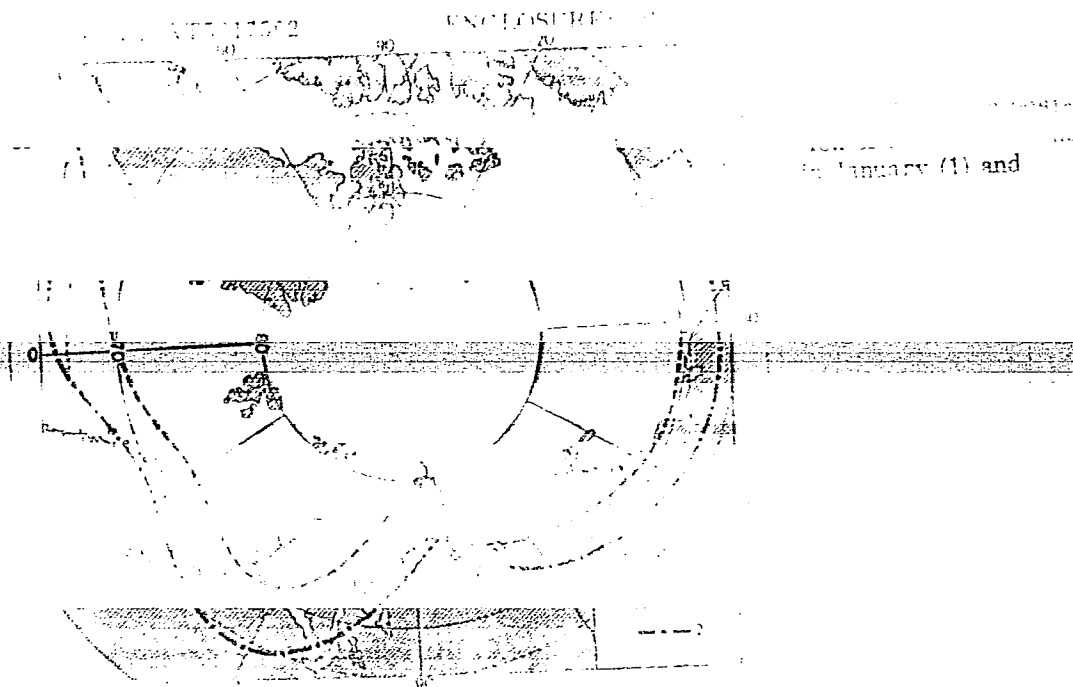
L 63767-65
ACCESSION NR: AT5017502   ENCLOSURE: 02

ACCESSION NR: AT5017502   ENCLOSURE: 03

ENCLOSURE

L 63767-55
ACCESSION NR: AT5015702   ENCLOSURE: 05

CHUKANIN, N.N., assistent

Rectoromanoscopy in children ir bacillary dysentery. Med. zhur,
Uzb. no. 2:13-15 F '61.   (MIRA 14:2)

1. Iz kafedry detskikh bolezney Andizhanskogo gosudarstvennogo
meditsinskogo instituta.
         (PROCTOSIGMOIDOSCOPY)   (DYSENTERY)

KABOKIN, A.N.; CHUKANOV, A.A.

Calculation and forecast of fracturing in rocks. Izv.
AN Kazakh. SSR. Ser. geol. 21 no.2:68-77 Mr-Ap'64.

(MIRA 17:5)

1. TSentral'no-Kazakhstanskoye geologicheskoye upravleniye,
gorod Karaganda.

CHUKANOV, D.

The ranks of the fighters for technical progress are growing.
Sov. profsoiuzy 7 no.14:17-19 Jl '59.   (MIRA 12:10)

1.Predsedatel' Kurganskogo oblastnogo soveta profsoyuzov.
             (Efficiency, Industrial)

CHUKANOV, I.M.

Vibration screen for sifting sand at the rate of 3-5 cubic meters per hour. Rats. 1 izobr.predl. v stroi. no.70:22-23 '53.
(Sieves) (Sand)   (MLRA 7:10)

CHUKANOV, N.

Effect of sodium metabisulfite on the bacterial flora of
silage. Trudy Inst. mikrobiol. i virus. AM Kazakh. SSR 7:
22-26 '63   (MIRA 16:12)

CHUKANOV, N.K.; KARPOV, M.S.

Alfalfa siloing conditions. Izv. AN SSSR. Ser. biol. no.6:
899-905 N-D '63.   (MIRA 17:2)

1. Institut mikrobiologii i virusologii, Alma-Ata.

PODCHUFAROV, B.M., kand. tekhn. nauk, dots.; CHUKANOV, N.M., assistent

Representation of the given law of air pressure in the working flow space of variable volume. Izv. vys. ucheb. zav.; mashinostr. no.11/12:209-217 '58.   (MIRA 13:3)

1.Tul'skiy mekhanicheskiy institut.
          (Pneumatic machinery)

CHUKANOV, O.A.

Overall mechanization and automation of production processes is
a means for the elimination of heavy manual work. Mekh. i
avtom. proizv. 18 no.11:34-39 N '64   (MIRA 18:2)

1. Sekretar' Tul'skogo promyshlennogo oblastnogo komiteta
Kommunisticheskoy partii Sovetskogo Soyuza.

CHUKANOV, P.P.

Design and construction in a technology club. Politekh.obuch.
no.10:54-59 O '58.   (MIRA 11:11)

1. Popovskaya srednyaya shkola, Rostovskaya oblast'.
            (Pumping machinery)

CHUKANOV, V. A.

"Diseases of the Lungs," Medgiz, Moscow, 1947

CHUKANOV, V.D.

Protecting ladle lining from scouring with molten cast iron.
Sbor. rats. predl. vnedr. v proizv. no.2:55 '61.
(MIRA 14:7)

1. Metallurgicheskiy zavod "Svcbodnyy Sokol".
(Founding—Safety measures)

TIMOFEYEV, A.A.; CHUKANOV, V.D.; DVOSKIN, S.M.

Compartment system for the continuous drawing of pig iron and slag. Lit. proizv. no.2:13-15 F '65.   (MIRA 18:6)

TIMOFEYEV, A.A., kand. tekhn. nauk; CHUKANOV, V.D.; DVOSKIN, S.M.

Continuous tapping of cast iron and slag from cupola furnaces.
Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i
tekh. inform. 18 no. 12:4-5 D '65   (MIRA 19:1)

KRASIKOV, Z.D., kandidat sel'skokhozyaystvennykh nauk; CHUKANOV, V.I.

Effect of the yarovization of spring wheat on the yield and
quality of seeds. Agrobiologiia no.4:70-77 Jl-Ag '56.
(MLRA 9:10)

1.Sel'skokhozyaystvennyy institut, gorod Novosibirsk.
(Wheat) (Vernalization)

CHUKANOV, Vyacheslav Il'ich; SMIRNOV, Sergey Alekseyevich; FAYBISOVICH, I.L., otvetstvennyy redaktor; NADEINSKAYA, A.A., tekhnicheskiy redaktor

[Model KRU-350 heavy belt conveyer] Moshchnyi lentochnyi konveier KRU-350 Moskva, Ugletekhizdat, 1956. 27 p.   (MIRA 9:8)
    (Conveying machinery)

CHUKANOV, V.I.

Parameters of rubber cable conveyer belts of various width.
Kauch.i rez. 21 no.7:51-53 Jl '62.
(MIRA 15:7)

1. Gosudarstvennyy proyektno-konstruktorskiy i eksperimental'nyy
institut ugol'nogo mashinostroyeniya.
          (Belts and belting)

SHELYKH, A.I.; CHUKANOV, V.Z.,

Equipment for the rapid determination of the temperature dependence of
the thermo-e.m.f. in semiconductors in a broad temperature range. Porosh.
met. 2 no.6:96-99 N-D '62.   (MIRA 15:12)

1. Institut polyprovodnikov AN SSSR, Leningrad.
     (Semiconductors)   (Thermoelectricity)

CHUKANOVA, I.;BELOVEZHDOV, N.

"Fine Initiative." p. 4,
(ZDRAVEN FRONT, No. 49, Dec. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

NEVSKIY, A. S.; ARSEYEV, A. V.; CHUKANOVA, L. A.; MALYSHEVA, A. I.; SHAROVA, T. V.

"Convective heat transfer in cylindrical chambers with recirculation."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

All-Union Sci Res Inst Metallurgy.

ABSOCELTS

... physical nature of various methods of calculating radiation from a ... radiating medium with variable temperature

... of the medium. ... are described ...

L 45635-65

ACCESSION NR: AP5006475   /

on the assumption that the absorption coefficients are independent of the temper-
ature of the absorbing medium, a method based on the assumption that the absorption
coefficients are proportional to the density (Beer's law), and a method based on
calculating the radiation from the spectral characteristics of the gases. The redi-
as layer with uneven thickness distribution

Heat Engineering)

L 10091-66   EWT(1)/EIC(F)/EPF(n)-2/EWG(m)   WW/GS

ACC NR: AT6001367   SOURCE CODE: UR/0000/65/000/000/0230/0238

AUTHOR: Nevskiy, A. S.; Arseyev, A. V.; Chukanova, L. A.; Malysheva, A. I.;
Sharova, T. V.

ORG: All-union Scientific Research Institute of Metallurgical Heat Engineering,
Sverdlovsk (Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy
teplotekhniki)

TITLE: Convective heat transfer in cylindrical chambers with flow recirculation

SOURCE: Teplo- i massoperenos. t. 1: Konvektivnyy teploobmen v odnorodnoy srede
(Heat and mass transfer. v. 1: Convective heat exchange in an homogeneous medium).
Minsk, Nauka i tekhnika, 1965, 230-238

TOPIC TAGS: heat transfer, cooling, combustion chamber

ABSTRACT: Experiments were made to determine the heat transfer conditions when a
hot gas is injected through a nozzle at the closed end of a cylindrical chamber.
Under these conditions, a pressure gradient along the wall is established which in-
duces flow recirculation. The latter considerably increases the heat transfer
from the gas to the wall as compared with conventional turbulent heat transfer
without recirculation. The experiments were conducted with two chambers which were
1.88 m and 2.43 m long and 0.3 and 0.18 m in diameter. The cylinder jackets were
divided into 13 and 16 separate compartments, respectively, to permit calorimeteric

Card   1/2

L 10C91-66

ACC NR: AT6001367

measurement of the heat transfer at various points in the chamber. Air preheated to 973K was injected through one central and one peripheral nozzle. The nozzle diameters and the flow rates were varied as parameters. Nu_{ex} (experimental Nusselt number) were determined from the measured flow rates and temperatures in each calorimetric section. Nu was then calculated from the formula $Nu = 0.018 Re^{0.8}$, and the ratio $\phi = Nu_{ex}/Nu$ was calculated and plotted for various air flow rates and nozzle sizes as a function of the distance from the inlet. It was found that ϕ increases and at a distance $\ell = (1.5—2.9)D$ (D is the chamber diameter), it reaches a maximum which for a given flow rate may attain a value of 7. When the air flow rate through the central nozzle was increased, the maximum of ϕ shifted toward the chamber outlet. The maximum had the lowest value when the air flow rates through the central and peripheral nozzles were equal. When air was injected through 55 uniformly spaced orifices in the chamber bottom, ϕ had no maximum and decreased rapidly to the normal value for turbulent heat transfer. Orig. art. has: 5 figures.

[PV]

SUB CODE: 21/ SUBM DATE: 31Aug65/ ATD PRESS: 4/76

H W

Card 2/2

GAVRILOVA, S.A.; POKSHISHEVSKIY, V.V., prof., red.; CHUKANOVA, L.V., red.

[Economic administrative regions of the U.S.S.R.; catalog of new literature on nature, resources and economy] Ekonomicheskie administrativnye raiony SSSR; ukazatel' novoi literatury po prirode, resursam i khoziaistvu. Pod red. V.V.Pokshishevskogo. Moskva. No.8. [Regions of the Far East] Raiony Dal'nego Vostoka. 1958. 42 p.   (MIRA 12:10)

1. Akademiya nauk SSSR. Institut nauchnoy informatsii.
          (Siberia, Eastern--Economic conditions)

SHUL'GA, V.Ya., kand.tekhn.nauk; AL'BREKHT, V.G., prof., red.; CHUKANOVA,
    L.V., red.; SOFIANO, N.K., red.; PEREVERZEVA, T., tekhn.red.

    [Continuous rail track with reinforced concrete ties] Bessty-
    kovyi put' na podrel'sovom osnovanii iz zhelezobetona. Pod red.
    V.G.Al'brekht. Moskva, Vses.in-t nauchn. i tekhn.informatsii,
    1959. 90 p.   (MIRA 12:12)
                    (Railroads--Track)

SEMENOV, L.V.; DAVYDOV, V.P.; SHISHAKOV, N.V.; CHUKANOVA, O.M.;
     KIRSANOVA, O.P.

Prospects for and the economic effectiveness of using trapped
emulsions and watery petroleum products in the preparation of
acetylene. Khim. i tekh. topl. i masel 8 no.7:40-44 Jl '63.
                                                    (MIRA 16:7)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
     (Acetylene)   (Petroleum products)   (Cracking process)

_____ .T'm./_PF(c)/T   Pr-_   _E

_____N NR. AP4049874   S/0318/64/000/002/____ _

AUTHOR: Semenov, L.V.; Davy*dov, V.P.; Chukanova, O.M.

TITLE: A highly effective method of preparing acetylene by the electro-cracking of petroleum emulsions

SOURCE: Neftepererabotka i neftekhimiya, no. 2, 1964, 29-32

TOPIC TAGS: acetylene manufacture, petroleum electrocracking, electrocracked acetylene, petroleum refining

ABSTRACT: This is a cost study of V.V. Tatarinov's patent No. 4_352 (1924) covering ___ _____ing by microdischarge of various liquid petroleum products such as crude oil, ___ ___e, gasoline and masut, resulting in a gaseous material containing __t_ 30% H_2C_2 ____ _s. 8-15% by pyrolysis). The authors _____ ___ _ ____ __ ____ _____

____ of acetylene from oil containing 30% water, the quantity of raw material

Card   1/2

L 23443-65
ACCESSION NR: AP4049874

required is 3055 kg; 3260 nm^3 of synthetic gas is produced. The corresponding figures
_____ at the 177 water are _____
_____ kg carbon black. The method is not further described but costs at the
_____ plant are analyzed in detail. _____
_____ miles by electric _____

_____ Institut goryuchikh iskcpayemy*kn (Institute of _____ Fuel)

                    ENCL. _____   _____

_____ 005   OTHER: 000

Card   2/2

S/124/62/000/008/007/030
I006/I242

AUTHOR: Chukanova, T.I.

TITLE: Axially symmetrical flow of a gas with penetrable
             boundaries

PERIODICAL: Referativnyy zhurnal, Mekhanika, no.8, 1962, 26,
             abstract 8B156 (Inzhenernyy zh., v.1, no.2, 1961, 45-51)

TEXT: The problem of rendering uniform an axially symmetrical super-
sonic flow during its motion in a tube with penetrable walls is con-
sidered. It is shown that, in analogy to the case of plane flow,
the penetration straightens out an initially non-uniform stream. The
problem of the behaviour of a non-uniform flow in a cylindrical sec-
tion of a round tube in the absence of penetrability is considered
as a special case. It is shown that in this case the initial non-
uniformity in velocity is not damped along the tube.

[Abstracter's note: Complete translation.]

Card 1/1

YEVREINOVA, T.N.; POGOSOVA, A.V.; CHUKANOVA, T.I.; LARIONOVA, T.I.

Introducting of amino acids into coacervates. Nauch. dokl.
vys. shkoly; biol. nauki no.1:159-164 '62.   (MIRA 15:3)

1. Rekomendovana kafedroy biokhimii rasteniy Moskovskogo
gosudarstvennogo universiteta im. M.V. Lomonosova.
                    (COACERVATES)
                    (AMINO ACIDS)

AUTHORS: Derzhavina A.I., and Chukanova T.I.   (Moscow)

TITLE: Integration of the equations of plane isentropic motion of a gas with large supersonic velocities

TEXT: The equations of plane adiabatic flow of gas in terms of the velocity potential and the stream function are formulated. The solution of the problem consists in the integration of this system of equations and the transfer to the physical plane by the quadrature of expressions for the complete differentials of the x and y coordinates. The general integral of the system of differential equations cannot be expressed in an elementary manner in terms of arbitrary functions. The variable coefficient in the potential and stream function equations can be approximated for moderate Mach numbers. If so, the system of equations can be integrated. In the present analysis, this variable coefficient is approximated for very large Mach numbers. The chosen approximation is shown to be good in the range of Mach numbers between 2 and 11. The transformation of the potential flow equations so obtained and

Card 1/2

Integration of the equations of ...   S/258/63/003/001/006/022
                                         E191/E135

the solution of their basic boundary value problems is the subject
of the present paper. Under certain conditions, the approximate
equations become Darbou equations having whole number coefficients.
These have a solution in terms of arbitrary functions and their
derivatives. The computation of the coordinates in the physical
plane is discussed. The main boundary value problem is the Cauchy
problem which is formulated. In one case, the solution is
determined by the conditions along two characteristic curves of
different families. In another case, the solution is determined
from data along one characteristic curve and a free surface.
Finally, the solution can be determined from values along one
characteristic curve and a wall.
There are 1 figure and 1 table.

ASSOCIATION: Institut mekhaniki AN SSSR
              (Institute of Mechanics, AS USSR)

SUBMITTED: March 12, 1962

Card 2/2

DERZHAVINA, A.I., (Moskva); CHUKANOVA, T.I., (Moskva)

Some exact solutions of equations of a monatomic gas flow. Inzh.
zhur. 3 no.3:529-535 '63.   (MIRA 16:10)

1. Institut mekhaniki AN SSSR.
                    (Gas dynamics)

ACCESSION NR: AP4037108   S/0258/64/004/002/0321/0325

AUTHOR: Chukanova, T. I. (Moscow)

TITLE: Approximate integration of equations of plane vortex gas motion

SOURCE: Inzhenernyy*y zhurnal, v. 4, no. 2, 1964, 321-325

TOPIC TAGS: vortex gas motion, approximate integration, entropy, flow function

ABSTRACT: The author proposes an approximate method for solving problems of plane vortex gas motion, without the restriction of small variation of entropy. The equations for the problem are

$$v \frac{\partial^2 \psi}{\partial p^2} - \frac{\partial^2 v}{\partial p^2} \frac{\partial^2 \psi}{\partial \theta^2} + 2 \frac{\partial v}{\partial p} \frac{\partial \psi}{\partial p} + \frac{\partial v}{\partial \psi} \left(\frac{\partial \psi}{\partial p} \right)^2 - \frac{\partial^2 v}{\partial p^2 \partial \psi} \left(\frac{\partial \psi}{\partial \theta} \right)^2 = 0,$$

$$\frac{v^2}{2} + \frac{\varkappa}{\varkappa - 1} p^{\frac{\varkappa-1}{\varkappa}} \vartheta(\psi) = i_0, \quad \vartheta(\psi) = 2 \frac{\varkappa-1}{\varkappa+1} p^{1/\varkappa} \rho,$$

(1)

where ψ are flow functions, p is pressure, and θ is the angle of deviation of the

Card 1/2

ACCESSION NR: AP4037108

velocity vector from the x axis. Transition to the physical plane is accomplished
by the formulas

$$ds = d\ (x + iy) = -\ e^{i\theta}\left[\left(v\frac{\partial\psi}{\partial p} + i\frac{\partial v}{\partial p}\frac{\partial\psi}{v\partial\theta}\right)d\theta + \left(\frac{\partial^2 v}{\partial p^2}\frac{\partial\psi}{\partial\theta} + i\frac{\partial v}{\partial p}\frac{\partial\psi}{\partial p}\right)\partial p\right]. \quad (2)$$

Equations (1) and (2) keep their form with passage to dimensionless variables.
For the class of functions treated by the author, it is possible to write the
solutions of the basic boundary value problems of gas dynamics: the Cauchy problem,
the Goursat problem, the flow problem with a free surface, and the problem of flow
around a solid wall. Orig. art. has: 8 formulas.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics, AN SSSR)

SUBMITTED: 27Nov63   DATE ACQ: 05Jun64   ENCL: 00

SUB CODE: AI, MM   NO REF SOV: 005   OTHER: 000

Card 2/2

L 11247-66   EWT(d)/EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1)   IJP(c)

ACC NR: AP6002615   SOURCE CODE: UR/0258/65/005/006/1021/1027
              44,55
AUTHOR: Chukanova, T. I. (Moscow)   *64*
                                                                B

ORG: none
                                                    1,55
TITLE: Integrating the equations of supersonic two-dimensional isentropic gas
flow.

SOURCE: Inzhenernyy zhurnal, v. 5, no. 6, 1965, 1021-1027

TOPIC TAGS: gas dynamics, supersonic flow, boundary value problem, Cauchy problem,
two dimensional flow, *gas flow*
                                16,44,55
ABSTRACT: A method for solving boundary-value problems of gas dynamics is outlined
where the Chaplygin coefficient is replaced by a function with an arbitrary number
of constants. This approach makes it possible to approximate the Chaplygin function
with any degree of accuracy and in any range of velocities, and to obtain solutions
for boundary-value problems in analytical form with any number of transformations
of the initial equation $\psi(\xi, \eta)$ if the corresponding boundary-value problems are
solved in closed form. The Cauchy and Goursat problems with a free surface are
solved in closed form and the boundary-value problem with given values on the
characteristic and on a solid wall is reduced to a system of two ordinary equations
which are solved in the case of a rectilinear wall. Orig. art. has: 12 formulas.
                                                                          [AB]
SUB CODE: 20/ SUBM DATE: 10Aug65/ ORIG REF: 011/ OTH REF: 001/ ATD PRESS; *4174*
Card 1/1 HW   UDC: 533.6.011.5

CHUKANOVA, Z.I.

MERKUL' V. E., BAGDASAROW A.A., AL'PERIN P.M., GUREVICH I.B., LOGINOVA F.E.,
CHUKANOVA Z.I., SHKURKO E.A. ZARKHIN I.M.
Sostoianie serdechno-sosudistoi sistemy i krovetvorenie pri
gipertonicheskoi bolezni. /Condition of the cardiovascular
system and hemopoiesis in hypertension/ Ter. arkh. 23:2 Mar-
Apr 51 p. 13-26.

1. Professor Bagdasarov, Corresponding Member of the Academy
of Medical Sciences USSR. 2. Of the Hospital Therapeutic
Clinic (Director—Prof. A. A. Bagdasarov) of the Pediatric
Faculty of the Second Moscow Medical Institute imeni I. S.
Stalin.
CLML Vol. 20, No. 10 Oct 1951

CHUKANTSOV,S.M. (Kaluga)

Mathematical preparedness of students graduating from secondary schools. Mat. v shkole no.2:39-44 Mr-Ap '55.   (MLRA 8:6)
(Mathematics--Problems, exercises, etc.)

ZNAMENSKIY, M.A. (Moskva); LEBEDEV, V.P. (Moskva); CHUKANTSOV, S.M.
        (Kaluga)

        Polytechnical problems in mathematics courses. Mat. v shkole
        no.2:24-32 Mr-Ap '59.   (MIRA 12:6)
                (Mathematics--Problems, exercises, etc.)

CHUKANTSOV, Sergey Mikhaylovich; SIDOROVA, L.A., red.; ZYKINA, T.N.,
tekhn. red.

[Laboratory works on mathematics; manual for teachers] Labo-
ratornye raboty po matematike, posobie dlia uchitelei. Moskva,
Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1961. 102 p.
                                        (MIRA 15:3)

(Mathematics--Study and teaching)